TP-LINK® User Guide

TL-SF1008P

8-Port 10/100Mbps Desktop PoE Switch

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FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference.

2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Mark Warning

CE

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

SAFETY NOTICES

Cautions

Do not use this product near water, for example, in a wet basement or near a swimming pool.

Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

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Package Contents

The following items should be found in your box:

- One TL-SF1008P 8-Port 10/100Mbps Desktop PoE Switch
- One DC Power Adapter
- Four rubber cushions to be used under the switch
- This User Guide

Note

Make sure that the box contains the above items. If any of the listed items are damaged or missing, please contact with your distributor.

Chapter 1. Introduction of the Product

Thank you for choosing the TL-SF1008P 8-Port 10/100Mbps Desktop PoE Switch.

1.1 Overview of the Product

The TL-SF1008P 8-Port 10/100Mbps Desktop PoE Switch provides the seamless network connection, which integrates 100Mbps Fast Ethernet and 10Mbps Ethernet network capabilities.

This PoE Switch is also a Power Sourcing Equipment (PSE*). Four of the eight Auto-Negotiation RJ45 ports (port-1~port-4) on the switch support Power over Ethernet (PoE*) function, which can automatically detect and supply power with those IEEE 802.3af-complaint powered devices (PDs*).

*PSE: a device (switch or hub for instance) that will provide power in a PoE setup.

*PoE: This technology describes a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network.

*PD: a device powered by a PSE and thus consumes energy. Examples include powering IP telephones, wireless LAN access points, network cameras, network hubs, embedded computers etc.

1.2 Convention

The Switch or TL-SF1008P mentioned in this User Guide stands for TL-SF1008P 8-Port 10/100Mbps Desktop PoE Switch without any explanation.

1.3 Features

- Complies with IEEE802.3, IEEE802.3u, IEEE802.3af standards
- 8 10/100Mbps Auto-Negotiation RJ45 ports with 4-port PoE function (port-1~port-4), all of them support Auto-MDI/MDIX
- Supports PoE power up to 15.4W for each PoE port
- Supports PoE power up to 53W for PoE ports
- Supports PoE IEEE802.3af compliant PDs
- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
- 1K entry MAC address table of the TL-SF1008P with auto-learning and auto-aging

- LED indicators for monitoring power, link, activity and speed
- External power adapter supply

Chapter 2. Installation

During the installation procedure, please only use the accessories equipped with the switch.

2.1 Mounting the Switch on a Desk

To install the Switch, please follow the steps:

1) You can place the Switch on a flat desk.
2) Please insert the power adapter carefully to the power socket of the switch, and then connect it properly to a power source through the cable of the switch.
3) Ensure adequate ventilation space around the switch for dissipating heat and air.

Note

1) Please avoid any heavy thing placed on the switch.
2) Make sure the power is off before unplugging the power adapter.

2.2 Power On

The TL-SF1008P Switch can be used with DC power supply. Powering on the Switch, it will automatically initialize and its LED indicators will respond as follows:

1) All the LED indicators except PoE ports LED will light synchronously at first, then all of them included Link/Act LED (green), 100Mbps LED (green) and PoE MAX LED (red), will light off at once, which indicates the system initialized well.
2) The Power indicator will light all the time.

Note

If the LED indicators don't respond as described above, please check the power supply and its connection.

Chapter 3. Identifying External Components

This Chapter describes the front panel, rear panel and LED indicators of the Switch.

3.1 Front Panel

Figure 3-1 TL-SF1008P Switch Front Panel

The Switch's LEDs are located on the front panel.

Name	Status	Indication
Power	On(green)	Power on.
	Off	Power off.
PoE ports (port-1~port-4)	On(green)	There is a PoE PD connected to the port, which supply power successfully.
	On(red)	The PoE power circuit may be in short, or the power current may be over that of the PD's classification.
	Off	No PD connected to the corresponding port，or no power is supplied according to the power limits of the port.
PoE MAX	Flashing (red)	The power of all the connected PoE ports is >=53w.
	On(red)	The power of all the connected PoE ports is >=43w. No power may be supplied if additional PDs are connected.
	Off	The power of all the connected PoE ports is <43w, or there is No PD connected to the corresponding port.
Link/Act (port-1~port-8)	Flashing (green)	Data transmitting or receiving on corresponding port.
	On(green)	There is a 10Mbps or 100Mbps device connected to the corresponding port.
	Off	No device connected to the corresponding port.

100Mbps (port-1~port-8)	On(green)	There is a 100Mbps device connected to the corresponding port.
	Off	There is a 10Mbps device connected to the corresponding port, or there is no device connected to the corresponding port.

Note

If all PoE PDs power consumption is >= 53w, a priority* will be arranged among the PoE ports like port-1 > port-2 > port-3 > port-4, then the system will cut off the power of the lowest-priority port.

*Priority: This function will help protect the system when the system power is overloaded. For example, Port 1, 2 and 4 is using 15.4w (maximum power for per port is 15.4W), the system power is 46.2w in total. If there is an additional PD inserted to Port 3 with 10w, then the system will cut off the power of Port 4 because of the overloaded power, this means Port 1, 2 will use 15.4w, and Port3 will use 10w ,no power will be supplied to Port 4.

3.2 Rear Panel

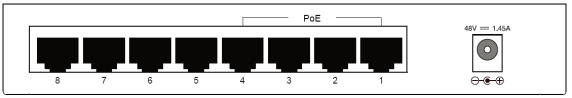

Figure 3-2 TL-SF1008P Switch Rear Panel

The following parts are located on the rear panel:

- **Power (48V):** 48V indicates the input voltage of the power adapter provided with this TL-SF1008P Switch. The Power socket is where you will connect the power adapter.
- **PoE Ports (1-4):** These ports support PoE function which integrates power and data onto one the same cable. Once the device you connect to the switch is identified, the switch will supply power through the PoE port, and then you can use it as a 10/100Mbps Auto-Negotiation RJ45 Ethernet port. The working status can be indicated by the corresponding LEDs on the front panel.
- **Ethernet Ports (1-8):** Besides the 4 PoE ports, the TL-SF1008P Switch is also equipped with the other four 10/100Mbps Auto-Negotiation RJ45 ports without PoE function. Once the network devices are connected to these 8 ports through the network cable, the switch will make them plug and play according to the Auto-MDI/MDIX detection. The working status can be indicated by the corresponding LEDs on the front panel.

Note

Make sure the PDs you connected to the switch are complaint with IEEE 802.3af.

Appendix A: Specifications

General	
Standard	IEEE802.3,IEEE802.3u,IEEE802.3x,IEEE802.3af
Topology	Star
Protocol	CSMA/CD
Data Transfer Rate	Ethernet: 10Mbps (Half Duplex) 20Mbps (Full Duplex)
	Fast Ethernet: 100Mbps (Half Duplex) 200Mbps (Full Duplex)
Network Media(Cable)	10Base-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
	100Base-TX: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
Number of Ports	8 10/100Mbps Auto-Negotiation RJ45 ports with PoE enabled (port-1 ~ port-4)
PoE Power on RJ-45	Power+: ping 3 & ping 6 Power -: ping 1 & ping 2
LEDs	Power, Link/Act, 100Mbps
Transfer Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically aging
Frame Filter Rate	10Base-T: 14880pps/Port
	100Base-Tx: 148800pps/Port
Frame Forward Rate	10Base-T: 14880pps/Port
	100Base-Tx: 148800pps/Port

Environmental and Physical	
Power Consumption	5.8 watts. (max. no PD connected) 58 watts (max. with 53w PD connected)
Operating Temperature	0 ~40℃ (32 ~104℉)
Storage Temperature	-40 ~70℃(-40 ~158℉)
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing